

**Electricity Distribution Services  
Default Price-Quality Path (Unison unforeseeable major capex project)  
Amendment Determination 2022 FNAR model  
Final amendment determination**



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## Description

*This model has been prepared and published for consultation purposes only.*

### General Description

This model calculates Unison Networks Limited's amended Forecast Net Allowable Revenue values under the Electricity Distribution Services Default Price-Quality Path (Unison unforeseeable major capex project) Amendment Determination 2022 [2022] NZCC 2, which comes into effect on 3 March 2022.

### Model specification

To reflect the calculation of the Maximum Annual Revenues in the 27 November 2019 EDB DPP3 financial model, adjusted such that—

- the Net Allowable Revenue value for assessment year 1 is retained;
- an approved revision to the annual BBAR values following an application for a reopener is recovered by revising the Net Allowable revenue values for assessment years 2–5 (the amended determination is to take effect at the start of assessment year 2);
- a revision to the annual BBAR values is the only allowed parameter change to the MAR calculations:
  - the CPI forecasts from the DPP3 November 2019 determination will apply, and no adjustment made in respect of CPI outcomes;
  - the X factor from the DPP3 November 2019 determination will apply in respect of the price changes between assessment years 2 & 5.

The model should also calculate an assessment year 1 starting price consistent with the forecast CPI and X factor values applied in the November 2019 EDB DPP3 financial model.

### Notes

Financial quantities in this model are expressed in NZD'000.

Annual quantities relate to years ending on 31 March.

### Calculation of the PV BBAR value used by this model

The value entered in cell 'Calculations!C12' of this workbook is the calculated present value at 1 Apr 2020 of the building blocks allowable revenue before tax over the regulatory period. The entered value, \$464,455.5k, is the result calculated in cell 'BBAR!C55' of the 27 November 2019 EDB DPP3 Financial Model after updating Unison's annual 'value of commissioned assets' entries in cells 'Inputs!P45:P49' of the same model. The updated 'value of commissioned asset' values and a link to the November 2019 financial model are shown below.

Value of commissioned assets, 2020/21	46,746
Value of commissioned assets, 2021/22	54,653
Value of commissioned assets, 2022/23	55,713
Value of commissioned assets, 2023/24	46,852
Value of commissioned assets, 2024/25	48,041

[Link to 27 November 2019 EDB DPP3 Financial Model](#)

## Maximum allowable revenue

Unison Networks Limited

Derivation of starting prices.

### Inputs

	Source	Value	2020/21	2021/22	2022/23	2023/24	2024/25
Year in regulatory period	EDB data		1	2	3	4	5
Applicable X factor	EDB data	–					
Additional allowance (PV at 1-Apr-20)	EDB data	–					
Forecast changes in the CPI element of the price path	EDB data		1.75%	1.95%	2.02%	2.00%	2.00%
Vanilla WACC (67th percentile)	EDB data	4.57%					
TFrev	TIMING	1.0183					
PV at 1 Apr 2020 of BBAR before tax over the regulatory period (Nov 2019 determinat	BBAR	463,516					
PV at 1 Apr 1 of BBAR before tax over the regulatory period (March 2022 final amendi	BBAR	464,456					

Sourced from cell BBAR1CS5 of the Nov 2019 DPP3 financial model.

Sourced from cell BBAR1CS5 of the DPP model with increased capex for Unison

### Calculations

#### CPI minus X revenues with applicable X factor (Nov 2019 determination)

	PV at 1-Apr-20	2020/21	2021/22	2022/23	2023/24	2024/25
PV at 1-Apr-20 of BBAR before tax over the regulatory period	463,516					
Additional allowance (PV at 1-Apr-20)	–					
PV at 1-Apr-20 of maximum allowable revenue before tax	463,516					
Indexed maximum allowable revenue before tax		1.0000	1.0195	1.0401	1.0609	1.0822
Present value of indexed maximum allowable revenue for each year		0.9563	0.9323	0.9096	0.8873	0.8655
Present value of indexed revenue	4.5511					
Maximum allowable revenue before tax in first year of the regulatory period in year-end terms		101,848				
Maximum allowable revenue before tax in year-end terms		101,848	103,834	105,937	108,056	110,217
Maximum allowable revenue before tax in revenue-date terms		100,019	101,970	104,035	106,115	108,238
PV at 1-Apr-20 of maximum allowable revenue before tax in year-end terms in each year		97,397	94,957	92,646	90,369	88,148
PV at 1-Apr-20 of year 1–5 maximum allowable revenue before tax	463,516					
Error check for PV equivalence (should = 0)	–					

#### CPI minus X revenues with applicable X factor (March 2022 final amendment determination)

	PV at 1-Apr-20	2020/21	2021/22	2022/23	2023/24	2024/25
PV at 1-Apr-20 of BBAR before tax over the regulatory period	464,456					
PV at 1-Apr-20 of year 1 MAR before tax	97,397					
Additional allowance (PV at 1-Apr-20)	–					
PV at 1-Apr-20 of maximum allowable revenue before tax to recover in years 2–5	367,059					
Indexed maximum allowable revenue before tax for each year 2–5			1.0000	1.0202	1.0407	1.0615
Present value of indexed maximum allowable revenue for each year 2–5		–	0.9145	0.8922	0.8703	0.8489
Present value of indexed revenue for years 2–5	3.5260					
Maximum allowable revenue before tax in second year of the regulatory period			104,101			
Maximum allowable revenue before tax in year-end terms for each year 2–5		–	104,101	106,209	108,333	110,499
Maximum allowable revenue before tax in year-end terms for each year		101,848	104,101	106,209	108,333	110,499
Maximum allowable revenue before tax in revenue-date terms for each year 2–5		–	102,231	104,301	106,387	108,515
Maximum allowable revenue before tax in revenue-date terms for each year		100,019	102,231	104,301	106,387	108,515
PV at 1-Apr-20 of maximum allowable revenue before tax in year-end terms for years 2–5		97,397	95,201	92,883	90,601	88,374
PV at 1-Apr-20 of maximum allowable revenue before tax	464,456					
Error check for PV equivalence (should = 0)	–					
Backcast maximum allowable revenue before tax in first year of the regulatory period in year-end terms		102,054				
Backcast maximum allowable revenue before tax in first year of the regulatory period in revenue-date terms		100,222				

### Outputs

	PV at 1-Apr-20	2020/21	2021/22	2022/23	2023/24	2024/25
Maximum allowable revenue before tax in revenue-date terms (Nov 2019 determination)		100,019	101,970	104,035	106,115	108,238
Maximum allowable revenue before tax in revenue-date terms (March 2022 final amendment determination)		100,019	102,231	104,301	106,387	108,515
Starting price (Nov 2019 determination)		100,019				
PV at 1 Apr 2020 of BBAR before tax over the regulatory period (Nov 2019 determination)	463,516					
PV at 1 Apr 1 of BBAR before tax over the regulatory period (March 2022 final amendm	464,456					

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